## ORDINANCE NO. 15-043

AN ORDINANCE OF THE CITY OF GALVESTON, TEXAS, AMENDING CHAPTER 21, "MECHANICAL AND AIR CONDITIONING CODE" OF "THE CODE OF THE CITY OF GALVESTON, 1982, AS AMENDED", BY ADOPTING, THE "2012 INTERNATIONAL MECHANICAL CODE" WITH AMENDMENTS; PROVIDING FOR AN EFFECTIVE DATE OF JULY 1, 2015; MAKING VARIOUS FINDINGS AND PROVISIONS RELATED TO THE SUBJECT.

WHEREAS, the City of Galveston is currently operating under the 2009 edition of the "International Mechanical Code" ("IMC") as amended and after reviewing this code, the Building Division of the Department of Planning and Community Development staff (staff) has noticed important differences between the contents of the 2009 edition and the 2012 edition; and,

WHEREAS, staff desires to keep the City of Galveston current with the most recent codes pertaining to construction and development; and,

WHEREAS, staff recommends adopting, with amendments, the "2012 International Mechanical Code"; and,

WHEREAS, in addition to updating the existing regulations relating to mechanical permitting, staff recommends amending regulations relating to the placement and installation of HVAC systems.

WHEREAS, Staff has presented the proposed code updates and amendments to the Building Board of Adjustments and Appeals. The Building Boards of Adjustments and Appeals, appointed by City Council is comprised of local builders, architects, engineers, electrical, mechanical and Plumbing contractors was formed with the intent to have local input into the permit process as well as review potential amendments to regulatory codes.

WHEREAS, staff recommends amending Chapter 21, "Mechanical and Air Conditioning Code" of "The Code of the City of Galveston 1982, as amended", by adopting the "2012 International Mechanical Code" with City of Galveston amendments, ("Appendix A") attached hereto to establish related permit fees and penalties.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF GALVESTON, TEXAS:

SECTION 1. The findings and recitations set out in the preamble to this Ordinance are found to be true and correct and they are hereby adopted by the City Council and made a part hereof for all purposes.

SECTION 2. The Code of the City of Galveston 1982, as amended" Article I, "Mechanical Code", Chapter 21, "Mechanical and Air Conditioning Code" is hereby amended to read and provide as follows:

## **Sec. 21-1.** Adopted.

The 2009 2012 edition of the International Mechanical Code, hereinafter referred to as the "Mechanical Code of the City of Galveston" (Mechanical Code) copies of which have this day been exhibited to and approved by the City Council and certified copies of which are on file in the respective offices of the City Secretary and the Building Official of the City, is hereby adopted by reference and declared to be the code of the City for regulating the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use or maintenance of mechanical systems in the City, save and except such portions as are hereinafter deleted, amended, varied or modified.

# <u>Section 21-2.</u> Amendments to the <u>2009\_2012</u> edition of the International Mechanical Code.

The 2009 2012 edition of the International Mechanical Code adopted pursuant to the foregoing provisions of this chapter is hereby modified and amended to the extent set forth in that document entitled "City of Galveston 2009 2012 IMC Amendments", which is hereby incorporated as "Appendix C A" which document is hereby adopted, its contents and provisions being incorporated herein by reference, and same being available for inspection and copying in the respective offices of the City Secretary and Building Official.

The Building Division of the Department of Planning and Community Development of the City of Galveston is subject to all applicable City Charter, City Code, and Personnel Rules and Regulations pertaining to jurisdiction and employment. No provision contained in the Mechanical Code governing the employment, staffing, hiring, termination, or discipline of an official or employee shall apply. Furthermore, the Mechanical Code shall not govern the appointment, liability and legal defense of any officer or employee.

## Sec. 21-3. Schedule of Mechanical Permit Fees.

Permit fees shall be required and fees applied to the extent set forth in that certain document entitled "2009\_2012 IMC Schedule of Mechanical Permit Fees" which is incorporated as "Appendix B" to the 2009\_2012 International Mechanical Code, which document is hereby adopted, its contents and provisions being incorporated herein by reference, and being available for inspection and copying in the respective offices of the City Secretary and the Building Official.

SECTION 3. It is hereby declared to be the intention of the City Council that the sections, paragraphs, sentences, clauses and phrases of this Ordinance are severable and, if any phrase, clause, sentence, paragraph or section of this Ordinance should be declared

invalid by the final judgment or decree of any court of competent jurisdiction, such invalidity shall not affect any of the remaining phrases, clauses, sentences, paragraphs and sections of this Ordinance.

SECTION 4. All Ordinances or parts thereof in conflict herewith are repealed to the extent of such conflict only.

SECTION 5. In accordance with the provisions of Sections 12 and 13 of Article I of the City Charter this Ordinance has been publicly available in the office of the City Secretary for not less than 72 hours prior to its adoption; that this Ordinance may be read and published by descriptive caption only.

SECTION 6. This Ordinance shall be and become effective on <u>July 1, 2015</u> after its adoption and publication in accordance with the provisions of the Charter of the City of Galveston.

APPROVED AS TO FORM:

DONNA M. FAIRWÉATHER ASSISTANT CITY ATTORNEY

I, <u>Janelle Williams</u>, Secretary of the City Council of the City of Galveston, do hereby certify that the foregoing is a true and correct copy of an Ordinance adopted by the City Council of the City of Galveston at its regular meeting held on <u>June 11, 2015</u> as the same appears in records of this office.



Secretary for the City Council of the City of Galveston

## APPENDIX A

<u>CHAPTER 1 "SCOPE AND ADMINISTRATION</u>" shall be amended to read and provide as follows:

101.1 – Title. These regulations shall be known as the Mechanical Code of <u>City of</u> Galveston, hereinafter referred to as "this code."

102.12 - License Required. A person may not design, alter, install or repair any air conditioning or refrigeration system within the City of Galveston, if they have not met all the requirements of the Title 8. Regulation of Environmental and Industrial Trades Chapter 1302 (air Conditioning and Refrigeration License Law) and have a valid licensed issued by the Texas Department of Licensing and Regulation. Additionally they must be registered as a Mechanical Contractor with the City of Galveston.

102.13 - Non-Licensed Contracting. Any person that performs any work as outlined in Section 104.5 without having a valid license (for the class of work they are performing) issued by the Texas, Department of Licensing and Regulation, unless exempted by Title 8 Chapter 1302 will be guilty of a misdemeanor.

103.2.1 - Restrictions on appointment. No person shall be appointed as inspector of air conditioning or mechanical refrigeration who has not had at least five (5) years' experience as an air conditioning or mechanical refrigeration inspector, journeyman, contractor, engineer or as a superintendent, foreman or competent mechanic in charge of air conditioning or mechanical refrigeration.

## 106.5.1 - Work commencing before permit issuance

Any person who commences work on a mechanical system <u>except for "emergency work"</u>, before obtaining the necessary permits shall be subject to a <u>double permit fee and \$100.00</u> 100 percent of the usual permit fee in addition to the required permit fees. A permit must be obtained the **next business** day after the "emergency work".

#### 106.5.2 - Fee Schedule

## **2012 IMC Schedule of Mechanical Permit Fees**

Fees for mechanical work shall be as indicated in the following schedule

Description

Split systems Base fee of \$25.00 + \$5.50 per ton (ea system) Package Units or PTAC's Base fee of \$25.00 + \$4.50 per ton (ea system) Refrigeration Systems Base fee of \$25.00 + \$4.50 per ton (ea system) Cooling Tower or Air Handlers Base fee of \$25.00 + \$3.50 per ton (ea system) Cooling Tower with Air Handlers Base fee of \$25.00 + \$5.50 per ton (ea system) Chiller or Air Handler Base fee of \$25.00 + \$3.50 per ton (ea system) Chiller with Air Handlers Base fee of \$25.00 + \$5.50 per ton (ea system) Ducts – Not part of new install Base fee of \$25.00 + \$2.00 per drop

Ventilating System 2000 CFM or Greater Base fee of \$40.00 (per unit)
Dehumidifier/ERV - Residential Base fee of \$40.00 (per unit)

Dehumidifier, Commercial Base fee of \$25.00 + \$3.50 per ton (ea unit) Boilers Base fee of \$25.00 + \$3.00 per BHP (ea unit)

Fire Places, all types

Ranges/Ovens - Commercial

Clothes dryers/dry clean machines - Commercial

Vent Hood - Commercial

Base fee of \$40.00 (per unit)

Base fee of \$35.00 (per unit)

Base fee of \$35.00 (per unit)

Base fee of \$35.00 (per unit)

Re-inspection Fee (1<sup>st</sup> visit) \$50.00 Re-inspection Fee (2<sup>nd</sup> visit to same property for \$200.00

same violation).

- (1) If a person makes application for permit, after the work has started, or after the work has been partially completed or concealed, he shall pay double the fee or fees which would ordinarily be required or \$100.00, whichever is greater.
- (2) The provisions of this subsection shall not apply to "emergency work" if the City of Galveston has been notified by the next business day of the work being done.
- (3) All such fees shall be paid to the building department. All permit fees and fees for first inspections shall accompany the permit application.
- (4) There shall be a registration fee charged and collected by the building department for all state licensed air conditioning contractors in the amount of Two hundred dollars (\$200.00) to be used for the administration of the air conditioning code. Additionally there will be an annual \$25.00 renewal fee.

# **106.5.3 - Fee Refunds** The code <u>Building</u> Official shall authorize the refunding of fees as follows.

- 1. The full amount of any fee paid hereunder which was erroneously paid or collected.
- 2. Not more than <u>seventy-five (75)</u> percent of the permit fee paid when no work has been done under a permit issued in accordance with this code.
- 3. Not more than <u>seventy-five (75)</u> percent of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan review effort has been expended.

The code official shall not authorize the refunding of any fee paid, except upon written application filed by the original permittee not later than 180 days after the date of fee payment.

108.4 - Violation penalties. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter or repair mechanical work in violation of the approved construction documents or directive of the code official, or of a permit or certificate issued under the provisions of this code, shall be guilty of a Class "C" misdemeanor, punishable by a fine of not more than \$500.00; or by imprisonment not exceeding [], or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense. however, the maximum penalty for offenses arising under such Code

governing fire safety, public health and sanitation shall not exceed the sum of two thousand dollars (\$2000.00) each day a violation continues shall constitute a new and separate offense.

108.5 - Stop Work Orders. Upon notice from the code official that mechanical work is being done contrary to the provisions of this code or in a dangerous or unsafe manner, such work shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, or to the owner's agent, or to the person doing the work. The notice shall state the conditions under which work is authorized to resume. Where an emergency exists, the code official shall not be required to give a written notice prior to stopping the work. Any person who shall continue any work on the system after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable for a fine of not less than [] dollars or more than [] dollars Upon refusal, failure or neglect of the person with a stop-work order to comply with the requirements of the order to abate the unsafe conditions of such work, the building official shall institute the appropriate action in the courts to compel compliance. Failure to comply with a Stop Work Order may result in a fine of double the permit fee or \$100.00 whichever is greater.

Section 109 – "Means of Appeal" shall be deleted in its entirety.

Refer to Chapter 10, Article II. Building Board of Adjustments and Appeals, of the Code of the City of Galveston.

<u>CHAPTER 3 "GENERAL REGULATIONS"</u> shall be amended to read and provide as follows:

- **301.2** Energy utilization. Heating, ventilating and air-conditioning systems of all structures shall be designed and installed for efficient utilization of energy in accordance with the 2012 International Energy Conservation Code.
- **301.3 Fuel gas appliances and equipment.** The approval and installation of fuel gas distribution piping and equipment; fuel gas-fired appliances and fuel gas-fired appliance venting systems shall be in accordance with the <u>2012 International Fuel Gas Code</u>.

## 301.7 - Electrical

Electrical wiring, controls and connections to equipment and appliances regulated by this code shall be in accordance with NFPA 70 the *National Electrical Code*, as amended.

301.12 - Wind resistance. Mechanical equipment, appliances and supports that are exposed to wind shall be designed and installed to resist the wind pressures determined in accordance with the 2012 International Building Code. (130 mph 3 second burst and 114 mph sustained).

- **303.3 Prohibited locations.** Fuel-fired appliances shall not be located in or obtain combustion air from, any of the following rooms or spaces:
  - 1. Sleeping rooms.
  - 2. Bathrooms.
  - 3. Toilet rooms.
  - 4. Storage closets.
  - 5. Surgical rooms.
  - 6. Sealed attic spaces. (attic spaces that have foam insulation installed on the under side of the roof deck and all means of ventilation to this space sealed) if the furnace has an efficiency rating of less than 90%+ and is not a two pipe system it must have combustion air ducted to the furnace from an outside location and sized in accordance with manufacturers instructions..

Exception: This section shall not apply to the following appliances:

- 1. Direct vent appliances, that obtain all combustion air directly from the outdoors. provided that the room is not a confined space and the building is not of unusually tight construction.
- 2. Solid fuel-fired appliances, provided that the room is not a confined space and the building is not of unusually tight construction.
- 3. Appliances installed in a dedicated enclosure in which all *combustion* air is taken directly from the outdoors, in accordance with Chapter 7. Access to such enclosure shall be through a solid door, weather-stripped in accordance with the exterior door air leakage requirements of the *International Energy Conservation Code* and equipped with an approved self-closing device.
- 4. Sealed combustion appliances may be installed in sealed attic systems. (Refers to Item 303.3(6).
- 306.1.1 Central furnaces. Central furnaces within compartments or alcoves shall have a minimum working space clearance of 3 inches (76 mm) 6 inches along the sides, back and top with a total width of the enclosing space being at least 12 inches (305) 24 inches wider than the furnace. Furnaces having a firebox open to the atmosphere shall have at least 6 inches (152 mm) working space along the front combustion chamber side. Combustion air openings at the rear or side of the compartment shall comply with the requirements of Chapter 7 clearance from the furnace door to the back side of the compartment or alcove door. Electric furnaces shall have at least 3 inches clearance from the furnace door to the backside of the closet or alcove door. Door opening width to these compartments or alcoves must be a minimum of 36 inches.
- 306.3 Appliances in attics. Attics containing appliances requiring access shall be provided with an opening and unobstructed passageway large enough to allow removal of the largest appliance. The passageway shall not be less than 30 inches (762 mm) high and 22 inches (559 mm) wide and not more than 20 feet (6096 mm) in length measured along the centerline of the passageway from the opening to the appliance. There must be a disappearing staircase with a minimum opening width of 22" and rated at 350 lb. This disappearing staircase is required for both new and replacement installations. The disappearing staircase, walkway and platform must be installed at the time of mechanical

rough-in inspection. The passageway shall not be less than 48" inches high and 24" wide from the point of attic access to the equipment location and not more than 20' from the access. The passageway shall have a continuous solid flooring of 34" plywood or 34" OSB not less than 24 inches (610 mm) wide. A level service space not less than 30 inches (762 mm) deep and 30 inches (762 mm) wide shall be present at the front or service side of the appliance. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm), and large enough to allow removal of the largest appliance, decked with of 34" plywood or 34" OSB not less than 72 inches deep and 96 inches wide shall be provided for equipment installation. The equipment must be installed on said platform with a minimum working space on the operator side of 30". Additionally the platform and level service space and walkway must be installed in accordance with the 2012 IECC. (This code requires that attic deck insulation not be compressed).

## **Exceptions**;

- 1. The passageway and level service space are not required where the appliance is capable of being serviced and removed through the required opening. If utilizing this exception, an 18 inch access space must still be provided to the non-operator side of the equipment, measured from the top rear of the air handler. This exception does not preclude the use of a disappearing staircase.
- 2. Where the passageway is unobstructed and not less than 6 feet (1829 mm) high and 22 inches (559 mm) 24 inches wide for its entire length, the passageway shall be not greater than 50 feet (15 250 mm) in length.
- 306.3.1 Electrical requirements. A <u>luminaire lighting fixture</u> controlled by a switch located at the required passageway opening and a receptacle outlet shall be provided at or near the appliance location in accordance with NFPA 70 the National Electrical Code, as amended. All equipment must be provided with a means of electrical disconnect apart from any disconnect means provided in the equipment.
- 306.5.2 Electrical Requirements. A receptacle outlet shall be provided at or near the equipment location in accordance with NFPA 70 the National Electrical Code, as amended.
- 306.5.3 Equipment and appliances on platforms. Where equipment and appliances are installed on elevated platforms at a height of eight feet (8') or greater, such platform shall be a minimum of 48 inches deep and 60 inches wide. Where two or more pieces of equipment are to be installed, there must be working distance of 30" or more between each piece of equipment to be installed. If platform is to be enclosed, the enclosure must have a 50% net free opening. Equipment and appliances of roofs or elevated structures shall adhere to 2012 IMC 306.5.
- 307.2.2 Drain pipe materials and sizes. Components of the condensate disposal system shall be cast iron, galvanized steel, copper, cross linked polyethylene, polybutylene, polyethylene, ABS, CPVCS or PVC pipe or tubing. All components shall be selected for the pressure and temperature rating of the installation. Joints and connections shall be made in accordance with the applicable provisions of Chapter 7 of the International Plumbing Code relative to the material type. Condensate waste and

drain line size shall be not less than ¾ inch (19 mm) internal diameter and shall not decrease in size from the drain pan connection to the place of condensate disposal. Where the drain pipes from more than one unit are manifolded together for condensate drainage, the pipe or tubing shall be sized in accordance with Table 307.2.2.

## CHAPTER 6 "DUCT SYSTEMS" shall be amended to read and provide as follows:

603.2.1 Return air systems. All return air systems shall have a minimum ducted/chase size of 144 sq. in. per ton of cooling. The minimum unobstructed total area of the outside and return air ducts or openings to an air handling unit shall be not less than 144 sq. in per 12,000 Btu/h output rating or as indicated by the conditions of the listing of the appliance. Electric heat pumps shall conform to UL 559 or UL 1995. Return air grilles must be located on the floor level the system serves and must be sized in accordance with ASHRAE recommendations.

## New construction or replacement duct systems:

- 1. When utilizing flexible duct for the return air;
  - a. Duct runs of 25' or less must provide 144 sq. in. per ton of installed cooling.
  - b. <u>Duct runs exceeding 25' but less than 100 feet linear length must provide</u> 144 sq. in. per ton of cooling installed.
  - c. Return ducts exceeding 100 feet must meet manufacturer's specifications for static pressure.
- 2. When utilizing sealed chases or metal duct:
  - a. Chases/ducts 50' or less must provide for a minimum of 144 sq. in. per ton of installed cooling.
  - b. Chases/ducts greater than 50' must provide for a minimum of 144 sq. in. per ton of installed cooling.